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#### INTRODUCTION

This fact sheet is a companion document to the draft State Waste Discharge Permit No. ST 6081. The Department of Ecology (the Department) is proposing to issue this permit, which will allow discharge of wastewater to the city of Longview sanitary sewer system which is conveyed to the Three Rivers Regional Wastewater Plant (TRRWP). This fact sheet explains the nature of the proposed discharge, the Department's decisions on limiting the pollutants in the wastewater, and the regulatory and technical bases for those decisions.

Washington State law (Revised Code of Washington [RCW] 90.48.080 and 90.48.160) requires that a permit be issued before discharge of wastewater to waters of the state is allowed. This statute includes commercial or industrial discharges to sewerage systems operated by municipalities or public entities which discharge into public waters of the state. Regulations adopted by the state include procedures for issuing permits and establish requirements which are to be included in the permit (Chapter 173-216 Washington Administrative Code [WAC]).

This fact sheet and draft permit are available for review by interested persons as described in Appendix A—Public Involvement Information. The fact sheet and draft permit have been reviewed by the Permittee. Errors and omissions identified in these reviews have been corrected before going to public notice. After the public comment period has closed, the Department will summarize the substantive comments and the response to each comment. The summary and response to comments will become part of the file on the permit and parties submitting comments will receive a copy of the Department's response. The fact sheet will not be revised. Changes to the permit will be addressed in Appendix C—Response to Comments.

GENERAL INFORMATION		
Applicant	Port of Longview	
Facility Name and Address	10 Port Way Longview, WA 98632-0126	
Type of Facility:	Bulk Transport and Storage	
	SIC Code: 4491 – Marine Cargo Handling 4214 – Local Trucking with Storage	
Discharge Locations	Outfall 001: Latitude: 46° 06' 41" N; Longitude: 122° 57' 15" W Outfall 002: Latitude: 46° 06' 26" N; Longitude: 122° 57' 18" W Outfall 003: Latitude: 46° 06' 54" N; Longitude: 122° 56' 51" W Outfall 004: Latitude: 46° 06' 13" N; Longitude: 122° 56' 36" W	
Treatment Plant Receiving Discharge	Three Rivers Regional Wastewater Plant (formerly known as the Cowlitz Water Pollution Control Plant)	
Responsible Official	Name: Ms. Judy Grigg Title: Manager of Environmental Affairs Address: P.O. Box 1258, Longview, WA 98632-7739 Telephone #: (360) 425-3305	

#### **BACKGROUND INFORMATION**

#### DESCRIPTION OF THE FACILITY

The Port of Longview (Port) is a public port district located in Cowlitz County, Washington. Operations include loading and unloading containerized and bulk cargo to and from ocean shipping vessels, warehousing of cargo, and transportation of cargo to, and from, domestic transportation facilities. Cargo is varied and includes logs, coal tar pitch, bulk ores and minerals, and bulk agricultural products. No raw materials are consumed and no products are produced by the Port.

The Columbia River shipping channel is being deepened to 43 feet. Eventually, the Port docks will be deepened to accommodate larger ships. Tidal activity is minimal. The Port is served by two major rail lines and Interstate Highway 5 is accessible within three miles of the dock.

The Port is located along the Columbia River 66 miles in-land from the Pacific Ocean. The Port is located within the city of Longview city limits. The location of the Port is shown in the vicinity map below (Figure 1). A site map of the facility is shown in Figure 2.

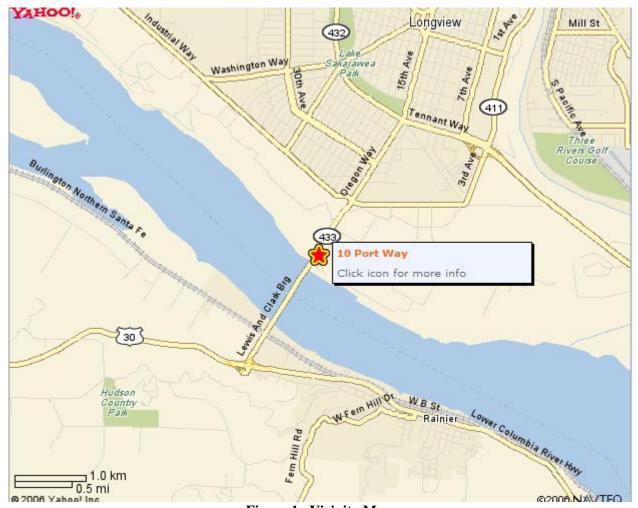


Figure 1. Vicinity Map.

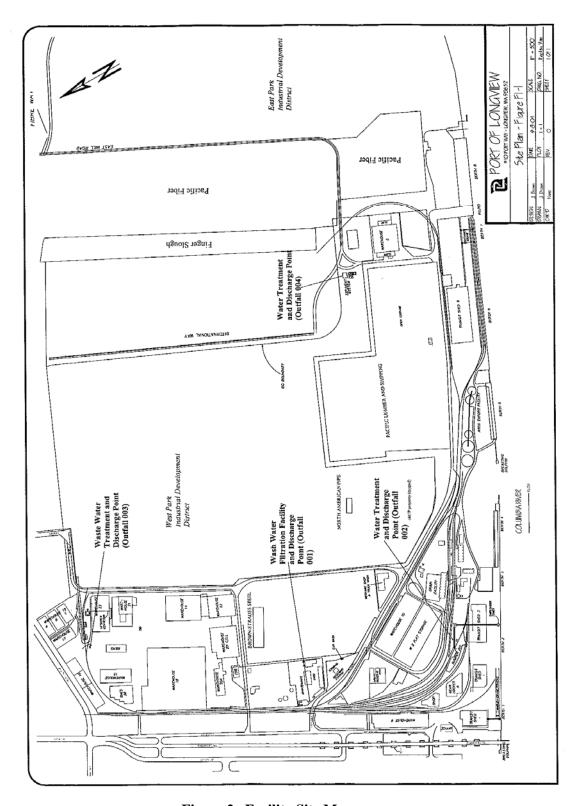


Figure 2. Facility Site Map.

#### **HISTORY**

Shipping operations at the Port began in 1921 when voters approved the establishment of a port district. At the time, state statute required port districts to be named after the largest city in the district and Longview had not yet been established as a municipality. Thus, the Port was originally named the Port of Kelso. Originally, the Port was located along the Cowlitz River.

The city of Longview was established in 1923. As the city of Longview flourished, the port believed that re-locating along the Columbia River would be more advantageous. In 1925, local citizens approved moving the Port of Kelso from the Cowlitz River to the foot of Oregon Way on the Columbia River where the port exists today.

Port commissioners issued bonds for the original land purchase of 40 acres and began construction of the first dock. The local economy was thriving along with Long-Bell Lumber Company and Longview Fibre Company began building a paper mill to utilize the wood waste from the Lumber Company. The first dock was completed in 1927 and was shipping products from Longview Fibre as well as timber, lumber, and shingles. In 1929, voters approved of renaming the port the Port of Longview.

Throughout its 80-plus years of history, the Port has sought to diversify its cargo in innovative ways. During World War II, the Port of Longview was established as one of the main supply bases for lend-lease shipping to export government war materials to Russia. When trade declined after the war, the port developed further trade in plywood and hardwood products with Southeast Asian companies.

By 1973, the Port was handling close to six million tons of cargo annually. Cargo included: grain, logs, timber, pulp, paper, aluminum, and foodstuffs. The Port established a reputation for handling heavy project cargo. At that time, several massive nuclear containment tanks used in the Trojan Nuclear Power Plant were handled.

The Port currently is considered a major seaport. There are seven self-operated marine terminals including multi-use cranes and facilities designed to handle a variety of bulk and breakbulk cargos. The port continues to diversify its cargo and has developed a "nich" for handling bulks and breakbulks, including steel. In the 1990's the Port doubled its land holdings by purchasing 300 acres of industrial property.

## TERMINALS AND CARGO HANDLING

The following provides a brief description of the terminals at the Port and the types of cargo handled at each terminal. This information was obtained from the Port of Longview's internet website address: www.portoflongview.com

- Berth 1: general cargo and cruise line terminal.
- Berth 2: dry bulk handling (agriproducts, chemicals, and minerals) facility.
- Berth 4: former bulk handling facility available for redevelopment.
- Berth 5: calcined petroleum coke bulk handling facility.
- Berth 6: breakbulk cargo handling facility with on-dock rail lines for steel, project, over-dimensional, heavy-lift, forest products, and general cargo.
- Berth 7: dry bulk and breakbulk handling facility with electrically operated container crane, bulk loader, clam shell buckets, and portable hopper conveyor system.

Berth 8: multi-purpose breakbulk and general cargo handling facility for steel, project, over-dimensional, heavy-lift, forest products, and general cargo

Berth 9: future terminal site adjacent to East Park industry property.

Ro-Ro: direct breakbulk to barge handling facility.

INDUSTRIAL PROCESSES

The Port generates industrial wastewater from clean up of transfer activities on the docks, and stormwater that falls onto the active area during loading/unloading operations. Each dock area has dedicated collection and treatment systems designed to pre-treat the pollutants generated at that location. Stormwater is collected and treated only during periods of activity at a berth. Each collection system transfers the industrial wastewater from a berth, or warehouse, to an appropriate treatment system, which reduces the pollutant load discharged to the Three Rivers Regional Wastewater Plant. The Port attempts to minimize the use of washwater and to minimize pollutant entrainment by a variety of practices, including sweeping.

Outfalls 001 and 003: These outfalls collect and treat discharges from Berth 1 and Warehouse 22, respectively. Historically, the Port has imported approximately 80,000 metric tons of coal tar pitch annually at Berth 1. Coal tar pitch is used by Pacific Northwest aluminum producers to bind coke into sacrificial anodes for the aluminum smelting process. Constituents of concern in coal tar pitch include: benzene, toluene, xylenes, polynuclear aromatic hydrocarbons (PAHs) such as naphthalene and anthracene, phenols, ammonia, and other organic bases.

Coal tar pitch is off-loaded at Berth 1, then trucked to Warehouse 22 and stored prior to melting and distribution by Reilly Industries, who operates the storage and melting facility on Port property. Coal tar pitch is transported in either liquid or dry form. Historically, Outfall 001 discharges treated washwater and stormwater from Berth 1 to the sanitary sewer. Washwater consists of dust control sprays, dump truck washdodwn, roadway sweeper truck washwater, and contaminated stormwater. Outfall 001 has not been used for many years but the infrastructure remains in place. Outfall 003 consists of washwater and stormwater from the Warehouse 22 area. Treatment and discharges to Outfall 003 are batch and not continuous.

Coal tar pitch imports dropped off significantly because of the shutdown of most of the northwest aluminum smelters. Currently, Berth 1 activity only consists of occasional washdown of Port railroad locomotives. Coal tar pitch is now imported at Berth 7.

<u>Outfall 002</u>: This outfall discharges treated water from Berth 2, where the Port has historically exported bulk materials such as monoammonium phosphate, granular urea, ammonium sulfate, di-ammonium phosphate, potash, triple super phosphate, zinc oxide, phosphate rock, soda ash, sodium sulfate, talc, bentonite clay, soy meal, and corn gluten. Typically, these products are transferred from railroad cars to ships docked at Berth 2. Wastewater is generated from washdown of the conveyor system (the conveyor is totally enclosed to prevent dust problems and wetting by stormwater) and bulk handling equipment. Washwater and any contaminated stormwater is collected and treated prior to discharge at 002. Treatment and discharge are batch, and not continuous.

<u>Outfall 004</u>: This outfall discharges treated wastewater from berths 5 and 7. Berth 5 is used primarily for calcined coke export. Berth 7 has been converted from containers to bulk import, including coal tar pitch, urea, calcined coke and other occasional, miscellaneous bulk imports. Washdown water and incidental stormwater from Berths 5 and 7 are collected and treated at the Outfall 004 treatment system prior to discharge. Outfall 004 was first used in September 1999. A new county sewer line was constructed in 2001 which allowed the Port to connect Outfall 004's discharge to it.

TREATMENT PROCESSES

Outfalls 001 and 003: As mentioned earlier, Outfall 001 has not had a discharge for many years, but is still available for use, if needed.

The area around Warehouse 22 has a stormwater collection trench which collects washwater (mainly washdown spray of dump trucks) in addition to incidental stormwater. The stormwater collection trench directs the wastewater flow to a sump where solids are removed. The solids are recycled by Reilly Industries. The water from the sump is pumped to a holding tank and then through a series of filters (5 micron) to another holding tank before being discharged through Outfall 003.

<u>Outfall 002</u>: Collected wastewater is pH adjusted and transferred to an inclined-plate clarifier. Polymer is added in-line and occasionally an anti-foaming agent is added as well. The sludge from the clarifier is recycled by Fire Mountain Farms in Cinebar, WA. The supernatant is discharged through Outfall 002.

<u>Outfall 004</u>: The 004 treatment system treats wastewater from Berths 5 and 7. Berth 5 wastewater is supposed to be treated via a cavitational air flotation system, adjusted for pH, then filtered through a 5 micron filter prior to discharge to Outfall 004. However, no wastewater from Berth 5 has been generated since cleanup has consisted of sweeping and shoveling versus washing.

At Berth 7, wastewater from coal tar pitch imports is flocculated with polymer, solids are removed in an inclined plate separator, pH is adjusted, then sent through the 5 micron filter. Residual solids collected are recycled by Reilly Industries. Process wastewaters from commodity transfers other than coal tar pitch, such as urea, are flocculated with polymer then clarified in a separate inclined plate separator, pH adjusted, and sent through the 5-micron filter before discharge.

Figures 3, 4, and 5 show schematic diagrams of the collection, treatment and disposal of stormwater generated during activities at one of the Port's berths.

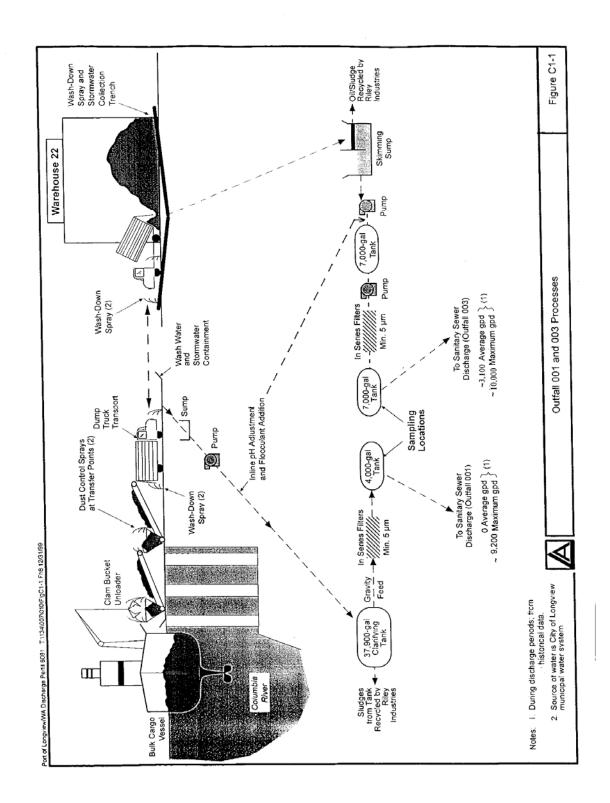


Figure 3. Schematic Diagram for Outfall 001 and 003 Stormwater Collection and Treatment Processes.

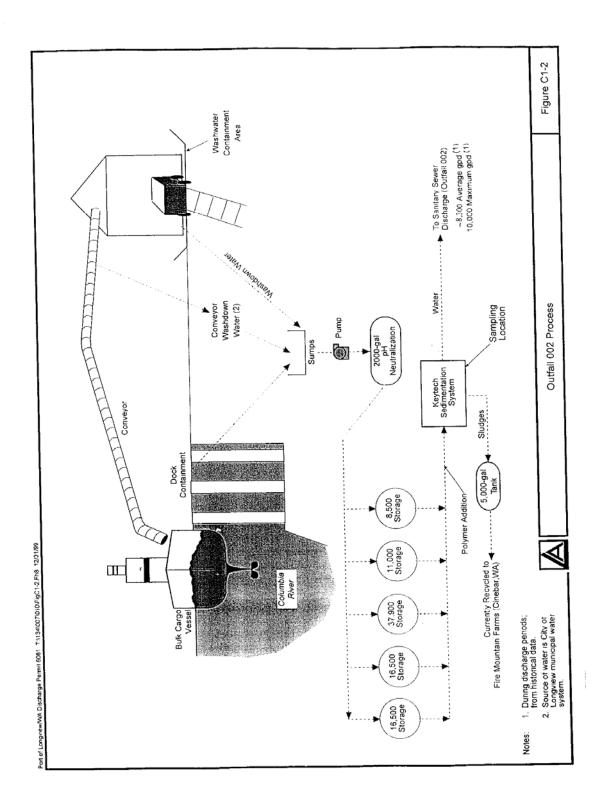


Figure 4. Schematic Diagram for Outfall 002 Stormwater Collection and Treatment Process.

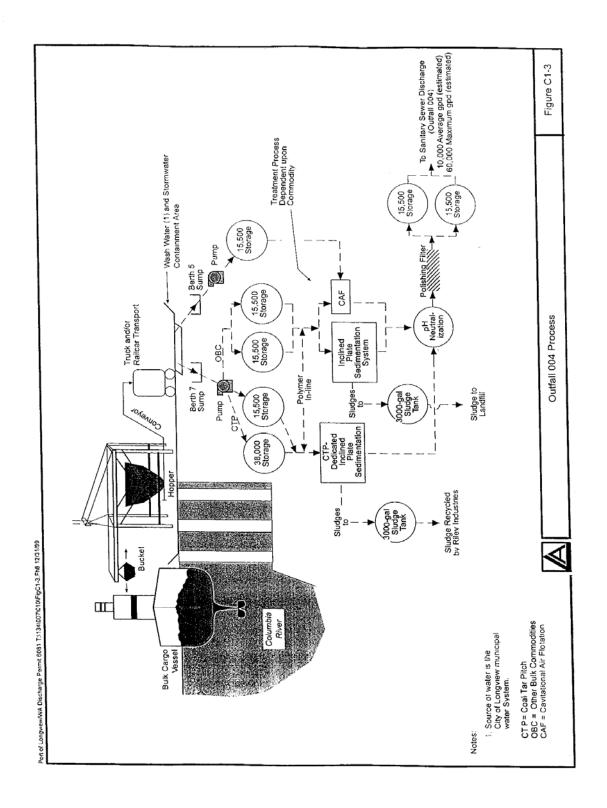


Figure 5. Schematic Diagram for Outfall 004 Stormwater Collection and Treatment Process.

# PERMIT STATUS

The Port was first issued a State Waste Discharge Permit on December 6, 1990. The permit was renewed on June 14, 1996, and again on November 28, 2001.

An application for permit renewal was submitted to the Department on January 7, 2005, and accepted by the Department on May 20, 2005.

#### SUMMARY OF COMPLIANCE WITH THE PREVIOUS PERMIT

The facility last received an inspection on March 28, 2006.

During the history of the previous permit, the Permittee has remained in compliance based on Discharge Monitoring Reports (DMRs) and other reports submitted to the Department and inspections conducted by the Department except the facility has never submitted their Operations and Maintenance Manual and the consequent annual review confirmation letters.

#### WASTEWATER CHARACTERIZATION

The concentration of pollutants in the discharge was reported in the permit application and in discharge monitoring reports. The proposed wastewater discharge is characterized for Outfalls 001, 002, 003, and 004 for the parameters shown in Tables 1, 2, 3, and 4, respectively. The characterization is derived from discharge monitoring reports (DMRs) submitted to the Department from January 2002 through March 2006 and from the permit renewal application.

Table 1. Outfall 001 Wastewater Characterization.

Parameter	Maximum	Average	Minimum
Flow (gpd)	No Discharge		
TSS (mg/L)	No Discharge		
Oil & Grease (mg/L)	No Discharge		
pH (s.u.)	No Discharge		
Zinc (mg/L)	No Discharge		

Table 2. Outfall 002 Wastewater Characterization.

Parameter	Maximum	Average	Minimum
Flow (gpd)	10,000	9,424	No Discharge
TSS (mg/L)	194	87	7
Ammonia (lbs/day)	13.9	4.3	0.0
Oil & Grease (mg/L)	36	10	Non-Detect
pH (s.u.)	9.46	7.39	5.17
Iron (mg/L)	4.8	1.9	0.1
Zinc (mg/L)	1.0	0.3	0.0

Table 3. Outfall 003 Wastewater Characterization.

Parameter	Maximum	Average	Minimum
Flow (gpd)	10,000	7,585	No Discharge
TSS (mg/L)	32	13	Non-Detect
Oil & Grease (mg/L)	Non-Detect	Non-Detect	Non-Detect
pH (s.u.)	8.95	7.64	6.24
Zinc (mg/L)	0.3	0.1	0.0

Table 4. Outfall 004 Wastewater Characterization.

Parameter	Maximum	Average	Minimum
Flow (gpd)	10,000	9,563	No Discharge
TSS (mg/L)	73	18	5
Ammonia (lbs/day)	44.5	5.5	0.0
Oil & Grease (mg/L)	Non-Detect	Non-Detect	Non-Detect
pH (s.u.)	9.72	7.88	7.08
Iron (mg/L)	3.7	0.4	0.0
Zinc (mg/L)	0.8	0.2	0.0

As required by the existing permit, total toxic organics (TTO, as defined in 40 Code of Federal Regulations (CFR) 433.11(e)) was sampled and analyzed once per permit cycle and the results were submitted along with the permit renewal application. The results from TTO analyses are provided on Table 5.

**Table 5. Total Toxic Organics Data Characterization.** 

ubie e. Tour Tome Organies Data Characterization.				
Date Collected	2/1/2002	Date Collected 4/19/2002		
Sample Name	004 Coke	Coke Sample Name 003 CTP Co		
Nothing Detected		Choloroform (µg/L)	5.6	
		Fluoranthene (µg/L)	15	
Date Collected	4/3/2002	Pyrene (µg/L)	14	
Sample Name	002 Soy	Benzo(b)fluoranthene	9.9	
		Benzo(a)pyrene	12	
Toluene (µg/L)	17			
Phenol (µg/L)	36			
Bis(2-ethylhexyl) Phthalate	22	_		

# SEPA COMPLIANCE

This is an already permitted facility. There are no known SEPA Compliance issues related to the discharges from this facility at this time.

#### PROPOSED PERMIT LIMITATIONS

State regulations require that limitations set forth in a waste discharge permit must be based on the technology available to treat the pollutants (technology-based) or be based on the effects of the pollutants to the POTW (local limits). Wastewater must be treated using all known, available, and reasonable treatment (AKART) and not interfere with the operation of the POTW.

The more stringent of the local limits-based or technology-based limits are applied to each of the parameters of concern. Each of these types of limits is described in more detail below.

#### TECHNOLOGY-BASED EFFLUENT LIMITATIONS

All waste discharge permits issued by the Department must specify conditions requiring available and reasonable methods of prevention, control, and treatment of discharges to waters of the state (WAC 173-216-110). No federal categorical limitations exist for this facility at this time. The following permit limitations are necessary to satisfy the requirement for AKART.

Most permit limits will be retained from the existing permit (issued November 28, 2001). The basis for these limits are discussed in detail in the fact sheet for the 1996 permit. The proposed permit will require some additional monitoring to characterize the discharges for BOD<sub>5</sub> and copper. This data will be

evaluated during the next permit renewal to determine whether or not any additional requirements will be needed.

#### Flow

The flow limitations are based on an estimate of washwater requirements at the various berths and an estimate of contact stormwater based on a 6-month, 24-hour storm. An allowance is allowed for unusual weather conditions which may result in flows in exceedance of the design criteria of the stormwater collection/treatment systems. Flow limitations were never exceeded nor was the excursion allowance ever used during the period from January 2002, through March 2006. Therefore, the existing flow limitations are retained in the proposed permit.

# Oil and Grease, and TSS

The existing oil and grease, and TSS limits are proposed to be retained at all outfalls.

#### Ammonia

The existing ammonia limits are proposed to be retained at all outfalls.

#### Metals

The existing zinc limits are proposed to be retained at all outfalls. It is proposed that the iron limitations be removed from the proposed permit. Iron does not appear to be a concern with the (TRRWP and the Port has been able to consistently and conservatively meet the iron limits established previously. Therefore, iron does not appear to be a pollutant of concern in the Port's discharge through Outfalls 001, 002, 003, and 004. Instead, the Department proposes to begin requiring consistently monitoring of copper in each of the outfalls. This is a more important use of Port resources since copper is a pollutant of concern in the TRRWP's discharge permit.

# **Total Toxic Organics (TTO)**

The existing permit required testing of TTO at all outfalls prior to submittal of the permit application. The test results show that some low concentrations of toxic organics were measured at Outfalls 002 and 003.

The design criteria for the new POTW upgrade sets a maximum monthly flow at 10 MGD. To be conservative, an assumption that 20,000 gpd (maximum daily permitted flow discharged through Outfalls 002 and 003) discharged from the Port would be diluted with the 10 MGD to provide a dilution ratio of 1:500 is calculated. This is used to estimate the resultant concentration of the pollutant at the POTW's effluent. Another conservative assumption inherent with this analysis is that there is no removal of these organic pollutants during the treatment process at the POTW (i.e. 100 percent of the pollutant is passing through). The Three Rivers Regional Wastewater Plant NPDES Permit (No. WA0037788) establishes a chronic dilution factor of 15.6. Table 6 provides a summary of the calculation results. Based on the results shown in Table 6, it can be seen that the estimated concentration at the edge of the chronic mixing zone is conservatively below the human health criteria for all of the TTO pollutants detected.

Table 6. Summary of TTO Reasonable Potential to Exceed Human Health Criteria.

Parameter	Conc. (µg/L)	Human Health Criteria (μg/L)	Estimated POTW Effluent Conc. (µg/L)	Estimated Conc. At Edge of Chronic MZ (µg/L)
Toluene	17	6,800	0.034	0.0022
Phenol	36	21,000	0.072	0.0046
Bis(2-ethylhexyl) Phthalate	22	1.8	0.044	0.0028
Choloroform	5.6	5.7	0.011	0.0007
Fluoranthene	15	300	0.030	0.0019
Pyrene	14	960	0.028	0.0018
Benzo(b)fluoranthene	9.9	0.0028	0.020	0.0013
Benzo(a)pyrene	12	0.0028	0.024	0.0015

Since there is no reasonable potential to violate water quality or human health criteria, or inhibit the activated sludge process, effluent limitations on TTOs for any of the outfalls is not necessary. However, a reasonable potential to violate water quality standards needs to be evaluated during permit renewal. Thus, monitoring for TTO will be required once during the next permit cycle. The data should be submitted along with application for permit renewal.

#### EFFLUENT LIMITATIONS BASED ON LOCAL LIMITS

In order to protect the TRRWP from pass-through, interference, concentrations of toxic chemicals that would impair beneficial or designated uses of sludge, or potentially hazardous exposure levels, limitations for certain parameters are necessary and to protect the city of Longview's sanitary sewer conveyance system. These limitations are based on local limits established by the city of Longview and codified in their Municipal Code. Applicable limits for this discharge include the following:

# pН

40 CFR 403.5 requires that the pH of the proposed discharge to not cause corrosive structural damage to the POTW nor cause interference with the activated sludge treatment process. 40 CFR 403.5(b)(2) mandates that pH never be below 5.0 to prevent corrosive damage to the POTW. The optimum pH for bacterial growth lies between 6.5 and 7.5, and most bacteria would be destroyed above a pH of 9.5 and below a pH of 4.0 (Metcalf and Eddy, 1991). A pH limit of 5.0 to 10.0 was imposed in the previous permit. This was based on the city of Longview's Sewer Use Ordinance (15.26.060, September 1986) which requires that any discharge to the city sewer must not be outside the range of 5.0 to 10.0.

It should be noted that Cowlitz County's Code restricts pH to between 5.5-9.0. This is relevant to Outfall 004 which has recently connected to a County sewer line. It should also be noted that Cowlitz County Public Works requested that the pH limitation range be changed from 6.0 - 9.0 to 6.0-10.0 in their Cowlitz County Landfill State Waste Discharge Permit (No. ST 6074). This request was discussed with staff at the TRRWP and they agreed that this change would be acceptable. It is also assumed that Cowlitz County also agrees that changing the upper limit from 9.0 to 10.0 would be acceptable since they had requested the change. Therefore, in order to remain consistent with the Cowlitz County Landfill permit, Outfall 004's pH limitation shall be to remain within the range of 5.5-10.0.

The pH limitation has been retained in the proposed limit; however, an additional significant digit has been added for clarification purposes.

# COMPARISON OF LIMITATIONS WITH THE EXISTING PERMIT ISSUED NOVEMBER 28, 2001

Table 7 provides a comparison of the limits in the existing State Waste Discharge permit in comparison with the limits in the accompanying proposed permit.

Table 7. Comparison of Existing and Proposed Permit Limits.

Table 7. Comparison of Existing and Proposed Personal	
Existing Limits	Proposed Limits
O.,46alla 00	01 1 002
Outfalls 00	
Flow – daily max. limit of 10,000 gpd	Flow – same daily max. limit
Total Suspended Solids – daily max. limit of 200 mg/L	Total Suspended Solids – same daily max. limit
pH – at all times between 5 and 10	pH – has been changed to "at all times between
	5.0 and 10.0"
Oil and Grease – daily max. limit of 50 mg/L	Oil and Grease – same daily max. limit
Zinc – daily max. limit of 2 mg/L	Zinc – same daily max. limit
Outfa	ıll 002
Flow – daily max. limit of 10,000 gpd	Flow – same daily max. limit
Total Suspended Solids – daily max. limit of 200	Total Suspended Solids – same daily max. limit
mg/L	
pH – at all times between 5 and 10	pH – has been changed to "at all times between 5.0 and 10.0"
Oil and Grease – daily max. limit of 50 mg/L	Oil and Grease – same daily max. limit
Zinc – daily max. limit of 2 mg/L	Zinc – same daily max. limit
Iron – daily max. limit of 7 mg/L	Iron – daily max. limit has been removed
Ammonia – daily max. limit of 125 lbs/day	Ammonia – same daily max. limit
Outfa	1
Flow – daily max. limit of 20,000 gpd	Flow – same daily max. limit
Total Suspended Solids – daily max. limit of 200 mg/L	Total Suspended Solids – same daily max. limit
pH – at all times between 5 and 10	pH – has been changed to "at all times between
	5.5 and 10.0"
Oil and Grease – daily max. limit of 50 mg/L	Oil and Grease – same daily max. limit
Zinc – daily max. limit of 2 mg/L	Zinc – same daily max. limit
Iron – daily max. limit of 7 mg/L	Iron – daily max. limit has been removed
I of waity many mine of thing 2	<u> </u>

The only change in the proposed permit limitations is the removal of the iron daily maximum limit of 7 mg/L from Outfalls 002 and 004. Iron has not been an issue for pass-through interference or impaired designated or special uses of sludge at the TRRWP. Furthermore, the Port of Longview's discharge iron concentration has been conservatively below the iron limitation originally established in previously issued permits. Since iron no longer seems to be a parameter of concern, the Department has decided to remove the iron limitation and begin to focus on identifying other potential pollutants of concern such as copper.

The pH limitation has been modified slightly to indicate the correct number of significant figures for all outfalls. This has been done for clarification purposes. The lower boundary of the pH limit range was increased from 5 to 5.5 for Outfall 004. This was done to remain consistent with the Cowlitz County Code and the decisions made in the Cowlitz County Landfill permit.

# MONITORING REQUIREMENTS

Monitoring, recording, and reporting are specified to verify that the treatment process is functioning correctly, and that effluent limitations are being achieved (WAC 173-216-110). Monitoring has remained the same as in the existing permit except that monitoring for iron has been removed and monitoring for BOD<sub>5</sub> and copper has been added.

The monitoring schedule is established in the proposed permit under Special Condition S2. Specified monitoring frequencies take into account the quantity and variability of the discharge, the treatment method, past compliance, significance of pollutants, and cost of monitoring.

Monitoring for  $BOD_5$  has been added to provide monitoring to assess whether or not applicable discharges are high strength discharges (subject to additional fees by the Three Rivers Regional Wastewater Plant (TRRWP) and to further characterize the effluent). Monitoring for copper has been added to provide background data to assess whether or not the Port is a significant contributor of this toxic pollutant to the TRRWP.

#### OTHER PERMIT CONDITIONS

#### REPORTING AND RECORDKEEPING

The conditions of Special Condition S3. are based on the authority to specify any appropriate reporting and recordkeeping requirements to prevent and control waste discharges (WAC 173-216-110 and 40 CFR 403.12 (e),(g), and (h)).

#### OPERATIONS AND MAINTENANCE

The proposed permit contains Special Condition S4. as authorized under Chapter 173-240-150 WAC and Chapter 173-216-110 WAC. It is included to ensure proper operation and regular maintenance of equipment, and to ensure that adequate safeguards are taken so that constructed facilities are used to their optimum potential in terms of pollutant capture and treatment. The proposed permit requires submission of an updated O&M manual for the entire wastewater system.

#### PROHIBITED DISCHARGES

Certain pollutants are prohibited from being discharged to the POTW. These include substances which cause pass-through or interference, pollutants which may cause damage to the POTW or harm to the POTW workers (Chapter 173-216 WAC) and the discharge of designated dangerous wastes not authorized by this permit (Chapter 173-303 WAC).

# **DILUTION PROHIBITED**

The Permittee is prohibited from diluting its effluent as a partial or complete substitute for adequate treatment to achieve compliance with permit limitations.

## SOLID WASTE PLAN

The Department has determined that the Permittee has a potential to cause pollution of the waters of the state from leachate of solid waste.

This proposed permit requires, under the authority of RCW 90.48.080, that the Permittee update the solid waste plan designed to prevent solid waste from causing pollution of the waters of the state and submit it to the Department.

#### SPILL PLAN

The Department has determined that the Permittee stores a quantity of chemicals that have the potential to cause water pollution if accidentally released. The Department has the authority to require the Permittee to develop best management plans to prevent this accidental release under section 402(a)(1) of the Federal Water Pollution Control Act (FWPCA) and RCW 90.48.080.

The Permittee has developed a plan for preventing the accidental release of pollutants to state waters and for minimizing damages if such a spill occurs. The proposed permit requires the Permittee to update this plan and submit it to the Department.

#### GENERAL CONDITIONS

General Conditions are based directly on state laws and regulations and have been standardized for all industrial waste discharge to POTW permits issued by the Department.

Condition G1. requires responsible officials or their designated representatives to sign submittals to the Department. Condition G2. requires the Permittee to allow the Department to access the treatment system, production facility, and records related to the permit. Condition G3. specifies conditions for modifying, suspending or terminating the permit. Condition G4. requires the Permittee to apply to the Department prior to increasing or varying the discharge from the levels stated in the permit application. Condition G5. requires the Permittee to construct, modify, and operate the permitted facility in accordance with approved engineering documents. Condition G6. prohibits the Permittee from using the permit as a basis for violating any laws, statutes or regulations. Conditions G7. relate to permit renewal and transfer. Condition G8. requires the Permittee to control production or wastewater discharge in order to maintain compliance with the permit. Condition G9. prohibits the reintroduction of removed pollutants into the effluent stream for discharge. Condition G10. requires the payment of permit fees. Condition G11. describes the penalties for violating permit conditions.

## PUBLIC NOTIFICATION OF NONCOMPLIANCE

A list of all industrial users which were in significant noncompliance with Pretreatment Standards or Requirements during any of the previous four quarters may be annually published by the Department in a local newspaper. Accordingly, the Permittee is apprised that noncompliance with this permit may result in publication of the noncompliance.

#### RECOMMENDATION FOR PERMIT ISSUANCE

This proposed permit meets all statutory requirements for authorizing a wastewater discharge, including those limitations and conditions believed necessary to control toxics. The Department proposes that the permit be issued for a period of less than five years. This will allow this permit's cycle to maintain conformance with the Department's goal of managing other individual industrial discharge permits in the Lower Columbia Basin Water Quality Management Area which revolves on a 5 year cycle.

# REFERENCES FOR TEXT AND APPENDICES

Foster Wheeler Environmental Corporation. **Engineering Report – Port of Longview – Berth 7 Effluent Treatment Facility – Longview, Washington**. December 29, 1998.

Port of Longview

Internet Site (http://www.portoflongview.com/default.asp)

Washington State Department of Ecology.

Laws and Regulations (http://www.ecy.wa.gov/laws-rules/index.html)

Permit and Wastewater Related Information (http://www.ecy.wa.gov/programs/wq/wastewater/index.html)

#### **APPENDICES**

#### APPENDIX A—PUBLIC INVOLVEMENT INFORMATION

The Department has tentatively determined to reissue a permit to the applicant listed on page 1 of this fact sheet. The permit contains conditions and effluent limitations which are described in the rest of this fact sheet.

Public notice of application was published on June 19, 2006, and June 26, 2006, in the *Daily News* to inform the public that an application had been submitted and to invite comment on the reissuance of this permit.

The Department will publish a Public Notice of Draft (PNOD) on (date) in (name of publication) to inform the public that a draft permit and fact sheet are available for review. Interested persons are invited to submit written comments regarding the draft permit. The draft permit, fact sheet, and related documents are available for inspection and copying between the hours of 8:00 a.m. and 5:00 p.m. weekdays, by appointment, at the regional office listed below. Written comments should be mailed to:

Industrial Unit Permit Coordinator Department of Ecology Southwest Regional Office P.O. Box 47775 Olympia, Washington 98504-7775

Any interested party may comment on the draft permit or request a public hearing on this draft permit within the 30 day comment period to the address above. The request for a hearing shall indicate the interest of the party and reasons why the hearing is warranted. The Department will hold a hearing if it determines there is a significant public interest in the draft permit (WAC 173-216-100). Public notice regarding any hearing will be circulated at least 30 days in advance of the hearing. People expressing an interest in this permit will be mailed an individual notice of hearing.

Comments should reference specific text followed by proposed modification or concern when possible. Comments may address technical issues, accuracy and completeness of information, the scope of the facility's proposed coverage, adequacy of environmental protection, permit conditions, or any other concern that would result from issuance of this permit.

The Department will consider all comments received within 30 days from the date of public notice of draft indicated above, in formulating a final determination to issue, revise, or deny the permit. The Department's response to all significant comments is available upon request and will be mailed directly to people expressing an interest in this permit.

Further information may be obtained from the Department by telephone, (360) 407-6280, or by writing to the address listed above.

This permit was written by John Y. Diamant.

#### APPENDIX B—GLOSSARY

- **Ammonia**—Ammonia is produced by the breakdown of nitrogenous materials in wastewater. Ammonia is toxic to aquatic organisms, exerts an oxygen demand, and contributes to eutrophication. It also increases the amount of chlorine needed to disinfect wastewater.
- **Average Monthly Discharge Limitation**—The average of the measured values obtained over a calendar month's time.
- Best Management Practices (BMPs)--Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the State. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.
- BOD<sub>5</sub>--Determining the Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of organic material present in an effluent that is utilized by bacteria. The BOD<sub>5</sub> is used in modeling to measure the reduction of dissolved oxygen in a receiving water after effluent is discharged. Stress caused by reduced dissolved oxygen levels makes organisms less competitive and less able to sustain their species in the aquatic environment. Although BOD is not a specific compound, it is defined as a conventional pollutant under the federal Clean Water Act.
- **Bypass**—The intentional diversion of waste streams from any portion of the collection or treatment facility.
- **Categorical Pretreatment Standards**—National pretreatment standards specifying quantities or concentrations of pollutants or pollutant properties which may be discharged to a POTW by existing or new industrial users in specific industrial subcategories.
- **Compliance Inspection Without Sampling-**-A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations.
- Compliance Inspection With Sampling--A site visit to accomplish the purpose of a Compliance Inspection Without Sampling and as a minimum, sampling and analysis for all parameters with limits in the permit to ascertain compliance with those limits; and, for municipal facilities, sampling of influent to ascertain compliance with the 85 percent removal requirement. Additional sampling may be conducted.
- Composite Sample—A mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-composite" (collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increased while maintaining a constant time interval between the aliquots.
- **Construction Activity**—Clearing, grading, excavation and any other activity which disturbs the surface of the land. Such activities may include road building, construction of residential houses, office buildings, or industrial buildings, and demolition activity.
- Continuous Monitoring –Uninterrupted, unless otherwise noted in the permit.
- **Engineering Report**—A document, signed by a professional licensed engineer, which thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater facility. The report shall contain the appropriate information required in WAC 173-240-060 or 173-240-130.
- **Grab Sample**—A single sample or measurement taken at a specific time or over as short period of time as is feasible.

- **Industrial User**—A discharger of wastewater to the sanitary sewer which is not sanitary wastewater or is not equivalent to sanitary wastewater in character.
- Industrial Wastewater—Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business, from the development of any natural resource, or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated storm water and, also, leachate from solid waste facilities.
- **Interference** A discharge which, alone or in conjunction with a discharge or discharges from other sources, both:
- Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal and;
- Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to subtitle D of the SWDA), sludge regulations appearing in 40 CFR Part 507, the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.
- **Local Limits**—Specific prohibitions or limits on pollutants or pollutant parameters developed by a POTW.
- **Maximum Daily Discharge Limitation**—The highest allowable daily discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. The daily discharge is calculated as the average measurement of the pollutant over the day.
- **Method Detection Level (MDL)--**The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is above zero and is determined from analysis of a sample in a given matrix containing the analyte.
- Pass-through— A discharge which exits the POTW into waters of the-State in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation), or which is a cause of a violation of State water quality standards.
- **pH**—The pH of a liquid measures its acidity or alkalinity. A pH of 7.0 is defined as neutral, and large variations above or below this value are considered harmful to most aquatic life.
- **Potential Significant Industrial User**--A potential significant industrial user is defined as an Industrial User which does not meet the criteria for a Significant Industrial User, but which discharges wastewater meeting one or more of the following criteria:
  - a. Exceeds 0.5 percent of treatment plant design capacity criteria and discharges <25,000 gallons per day or;
  - b. Is a member of a group of similar industrial users which, taken together, have the potential to cause pass through or interference at the POTW (e.g. facilities which develop photographic film or paper, and car washes).
  - The Department may determine that a discharger initially classified as a potential significant industrial user should be managed as a significant industrial user.
- Quantitation Level (QL)-- A calculated value five times the MDL (method detection level).

# Significant Industrial User (SIU)--

- 1) All industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N and;
- 2) Any other industrial user that: discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling, and boiler blow-down wastewater); contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the Control Authority\* on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement (in accordance with 40 CFR 403.8(f)(6)).

Upon finding that the industrial user meeting the criteria in paragraph 2, above, has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the Control Authority\* may at any time, on its own initiative or in response to a petition received from an industrial user or POTW, and in accordance with 40 CFR 403.8(f)(6), determine that such industrial user is not a significant industrial user.

- \*The term "Control Authority" refers to the Washington State Department of Ecology in the case of non-delegated POTWs or to the POTW in the case of delegated POTWs.
- **Slug Discharge**—Any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge to the POTW. This may include any pollutant released at a flow rate which may cause interference with the POTW.
- **State Waters**—Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington.
- **Stormwater**—That portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a storm water drainage system into a defined surface water body, or a constructed infiltration facility.
- **Technology-based Effluent Limit**—A permit limit that is based on the ability of a treatment method to reduce the pollutant.
- **Total Coliform Bacteria**—A microbiological test which detects and enumerates the total coliform group of bacteria in water samples.
- **Total Dissolved Solids**—That portion of total solids in water or wastewater that passes through a specific filter.
- **Total Suspended Solids (TSS)**--Total suspended solids is the particulate material in an effluent. Large quantities of TSS discharged to a receiving water may result in solids accumulation. Apart from any toxic effects attributable to substances leached out by water, suspended solids may kill fish, shellfish, and other aquatic organisms by causing abrasive injuries and by clogging the gills and respiratory passages of various aquatic fauna. Indirectly, suspended solids can screen out light and can promote and maintain the development of noxious conditions through oxygen depletion.
- Water Quality-based Effluent Limit—A limit on the concentration of an effluent parameter that is intended to prevent the concentration of that parameter from exceeding its water quality criterion after it is discharged into a receiving water.

# APPENDIX C—RESPONSE TO COMMENTS